HIT Standards Committee
Clinical Operations Workgroups – Task Force on Vocabulary

Tuesday, February 23, 2010, 9:00 a.m. to 4:30 p.m./Eastern Time
Omni Shoreham Hotel, 2500 Calvert Street, NW, Washington, DC

QUESTIONS FOR PANELISTS: John Quinn, SCO (Standards Development Organizations (SDO) Charter Organization)

I. Purpose: Obtain public input on, and engage expert stakeholders in discussion of "rules of the road" for how vocabulary subsets and vocabulary value sets should be created, described, distributed, and maintained in order to facilitate meaningful use of electronic health records (EHRs).

II. Questions to be Addressed in Public Comments

With reference to the Vocabulary Task Force's definitions (in Attachment A), please respond to your choice of at least any four of the following questions about convenience subsets and/or value sets that are needed to facilitate meaningful use of EHRs. Be sure to specify which questions you are answering and to which category(ies) of subsets and value sets your comments apply.

1) Who should determine those that are needed?
   An open consensus process. Preferably within an established SDO.
   It is likely that a process similar to HL7's RIM & Vocabulary Harmonization Processes should put in place to streamline the process of consensus determination instead of protracted balloting.

   While it is true that the initial determination will be large, there will also be a need for an ongoing maintenance process that will require very high quality and fast turn-around as gaps are deficiencies are identified in the released value sets.

2) Who should produce them?
   Many (if not most) of these the defined value sets and component values will be first represent individual patient clinical information. This information can well be critical to that patient's care and well being. The value sets (and in some cases their organization within the terminology) will also be subject to change as the knowledge of the science of medicine continues to grow and evolve. The very best experts need to be identified and then included in the organizational group with overall responsibility for producing any given value set.

   Some value sets are relatively routine and used primarily by an SDO (e.g., HL7 codes that identify segments, trigger events, etc.) The concern here is rather the

coded value sets that represent concepts, findings, symptoms, treatments, etc. These are contained in the payload of the SDO referenced messages and documents that are exchanged between and among IT systems that create and act on coded clinical data. It is these later value sets that must be entrusted to the most qualified individuals who may be found in medical academic institutions.

The United States would also be well served by looking at how these same issues are being handled in countries similar to the US who have already deployed and routinely use coded clinical values in terminology sets such as SNOMED and LOINC.

3) Who should review and approve them?

4) How should they be described, i.e., what is the minimum set of metadata needed?

   The metadata included must adequately describe the context that describes the source and any constraints that should be applied to the use and/or interpretation of the value set. As a matter of quality, selected values that populate a patient's medical record will need to have sufficient context to support the intended and possible subsequent use of the selected value.

   I recognize and it is widely discussed that the amount of metadata that accompanies any electronically generated and used value can be extremely burdensome to economic realities such as network/system performance and complexity of transport services. So care should be taken that added metadata has a specific important possible use and is not there to simply satisfy a high-level conceptual need.

5) In what format(s) and via what mechanisms should they be distributed?

   As a practical matter I assume that we are distributing new and updated value to IT systems that will use them to encode and decode clinical information for patient clinical care and then later subsequent secondary uses.

   The distribution and required synchronization of terminology set updates throughout the using community is very important to the consistent successful presentation of EMR data.

   Value sets will be updated (i.e., modified/corrected and/or extended) by a distribution update and then applied by the manager of an IT system (e.g., EMR System) that uses the updated coded value as a source of data. When that value is transmitted to a "not updated" IT system it will likely not be interpretable (or

worse yet incorrectly interpreted) by the receiving EMR System and could result in negative patient outcomes.

6) How and how frequently should they be updated, and how should updates be coordinated?

   As with any "software" update there are at least two different frequencies that need to be considered:
   a. "Stat" or urgent updates that are required to correct a deficiency that could result in a negative outcome. The frequency of this update should be consistent with the risk (i.e., more frequently if the risk is high);
   b. Routine updates that reflect non-urgent corrections and extensions to the value set. The frequency of this type of update would be relatively long, but it would be an update that was applied to all at the same time such as ICD and DRG is applied today.

7) What support services would promote and facilitate their use?
8) What best practices/lessons learned have you learned, or what problems have you learned to avoid, regarding vocabulary subset and value set creation, maintenance, dissemination, and support services?

   The United States would also be well served by looking at how these same issues are being handled in countries similar to the US who have already deployed and routinely use coded clinical values in terminology sets such as SNOMED and LOINC.

   Unfortunately, each country (e.g., the current member licensed countries of IHTSDO) seems to be destined to each have their own unique set of terminologies that define the country's reference set. Some of that may be inevitable because of the country-specific proprietary codes such as DRG and CPT in the US. It seems that each country has their own set of diagnostic abstracting and procedure codes. However, each of these countries is using similar sets and has similar development, maintenance and distribution requirements. The US is not first in treading this path and it should look to countries such as Canada, The UK where at least some deployment and routine use of these terminologies and their local mappings are now in use. I was personally working on the NHS Connecting for Health programme in 2006. At that time there were over one million active coded terms in the active mapping set in use by CfH. Surely there are some "dos" and "don'ts" that we can learn from the English Home Country's NHS.

9) Do you have other advice or comments on convenience subsets and/or value sets and their relationship to meaningful use?

10) What must the federal government do or not do with regard to the above, and/or what role should the federal government play?

Because we have only a limited time to conduct the hearing, we ask that you confine your oral remarks to **5 minutes**; Q&A with the Task Force members will follow. In order to maximize time at the hearing, we ask that you submit written comments on the above questions **no later than February 18, 2010**, so they can be reviewed by the Task Force members in advance.

There will be a broad solicitation of written public comments for this meeting. Approximately 10 people will be invited to provide in-person comments on February 23, 2010.